

A NEW SPECIES OF *COELOGYNE* (ORCHIDACEAE) FROM MANIPUR, INDIA¹T.K. PAUL, S.K. BASU AND M.C. BISWAS²

(With seven text-figures)

During a recent floristic survey in the Imphal valley, Manipur, several interesting orchids have been collected by Dr J. N. Ghatak of Manipur University. A new species of *Coelogyne* Lindl., collected during the exploration, is described with illustrations.

Coelogyne ghatakii T.K. Paul, Basu et Biswas sp. nov.

Coelogyne griffithii Hook. f. affinis, sed differt inflorescentiis brevioribus (12-14 cm), floribus 6-8, parvioribus (1-1.5 cm diam.), viridiflavis, sepalis trinervis, labelli lobis lateralibus ovato-ogy, oblongis, carinis 2, columnaque late alata.

Coelogyne ghatakii sp. nov. (Fig. 1-7)

Epiphytic or sometimes lithophytic herb. Pseudobulb 5.5 x 2 cm, ovoid-oblong, 4-angled with 4 grooves, dark-green. Leaves 2, petioled; petiole 2-3 cm long, glabrous, channeled; lamina 10-15 x 2.5-3.0 cm, elliptic-lanceolate, apex acute to acuminate, entire, gradually tapering at base, dark-green, coriaceous, 6-7 nerved. Inflorescence c 12 cm long, erect; peduncle c. 6.5 cm long, shorter than the leaves, slender, glabrous, green, naked, raceme with 6 to 8 flowers, basal portion covered with overlapping distichous brownish glumes. Flowers open successively, pedicellate, 1-1.5 cm across, greenish yellow; pedicel 5-10 mm long, slender, erect. Sepals 3, spreading, subequal, oblong-lanceolate, acute, entire, glabrous, 3-nerved, 6-7 x 3 mm; petals 2, spreading, 6-7 x 0.5 mm, linear, entire, apex obtuse, glabrous, 1-nerved. Labellum c. 7 x 5 mm, deeply 3-lobed, glabrous, greenish yellow; lateral lobes 4 x 1.5 mm, ovate oblong, obtuse, entire with 2-3 brown-

nish patches; midlobe 4.5 x 3.5 mm, subquadrate, recurved, retuse, narrow at base, base with a brown dot, entire, undulate, with 3-4 brown dots; keels 2, prominent on epichile extending near to the apex, yellowish, entire. Column c. 5 mm long, 1.5-2 mm across, winged on the upper part, wings serrate, light yellow; anther 1, c. 1.5 mm long and broad, light yellow; pollinia 4, c. 1 mm, oval, whitish yellow.

Type: India: Manipur, Imphal valley, 20th April 1988, *Ghatak* 2213a (Holotype : CAL; Isotypes: 2213b, c, d, Manipur Univ. Herb.).

Fls. & Frts.: April - June.

Ecology: This species grows on tall trees as well as on moss-covered rocks in the Imphal valley.

The new species has been recently collected in a remote area of Imphal valley. The fresh specimens were critically studied and it is found that the flowers are small and open successively in the inflorescence, i.e., only few at a time whereas the rest are still in bud-condition. The scape-base is naked but the base of the rachis has a series of distichous glumes and these characters are of the section *Ancipites* Pfitz & Kranzle. of the genus *Coelogyne*.

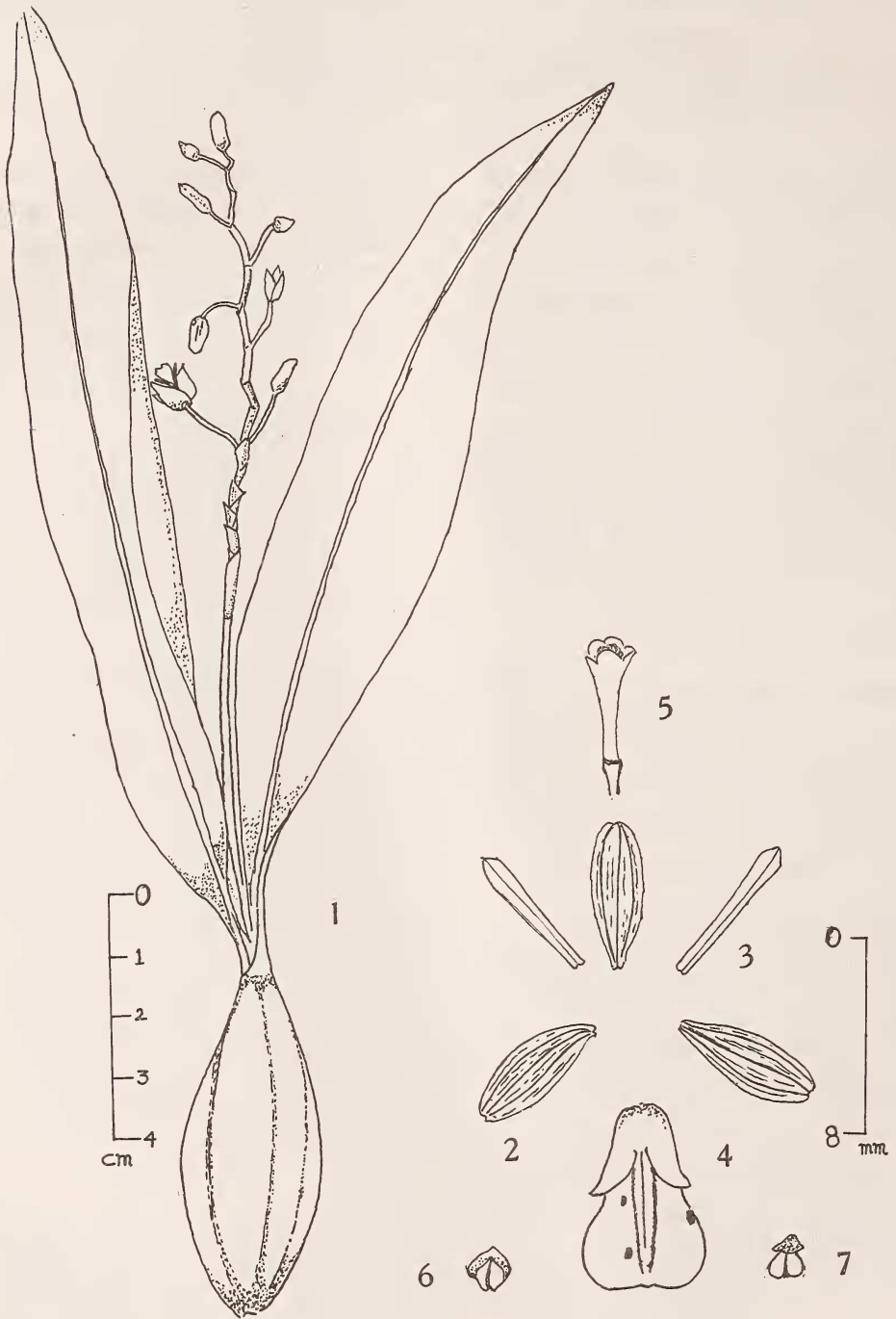
The new species is closely allied to *Coelogyne griffithii* Hook. f. of the above-mentioned section but differs in the characters tabled below: It is named in honour Prof. J.N. Ghatak of Manipur University, a leading plant taxonomist in India who collected this species.

ACKNOWLEDGEMENTS

We are thankful to the Director, Botanical Survey of India, for all facilities. Thanks are due to Dr. N.C. Majumdar, Scientist-SC, Botanical Survey of India, for rendering the Latin translation and Mr. Saibal Bose for line-drawing of this new taxa. Thanks are also due to Dr B.D. Sharma,

¹Accepted August 1988.

²Botanical Survey of India, Howrah-711 103.



Figs. 1-7. *Coelogyne ghatakii* sp. nov.

1. Habit; 2. Sepal; 3. Petal; 4. Labellum; 5. Column; 6. Anther; 7. Pollinia.

Scientist-SE, Central National Herbarium, B.S.I., for kindly going through the manuscript.

<i>C. griffithii</i>	<i>C. ghatakii</i>
Leaf : large (11.5-26.0 x 3-6 cm).	comparatively smaller (10-15 x 2.5-3 cm)
Inflorescence : longer (15-34 cm), 6-18-flowered.	shorter (12-14 cm), 6-8 flowered.
Flowers : 1.5-2 cm across, light brownish.	1-1.5 cm across, greenish-yellow.
Sepals : larger (1.0-1.3 x 0.3-0.6 cm), 5-nerved.	smaller (0.6-0.7 x 3 cm), 3 nerved.
Petals : larger (10-13x1 mm). Lateral lobes of labellum rounded, keels 5.	smaller (6-7 x 0.5 mm).. Lateral lobes of labellum ovate-oblong, keels 2.
Column : narrowly winged.	broadly winged

A NEW LEPIDOPTERAN *INDOCALA* GEN. NOV. FROM INDIA (OPHIDERINAE: NOCTUIDAE: LEPIDOPTERA)¹

H.S. ROSE AND A. SRIVASTAVA²
(With five text-figures)

Indocala gen. nov. has been proposed for the species *punjabensis* sp. nov. collected from Punjab (India). A brief account of the genitalia has been given along with adult description.

INTRODUCTION

While considering the taxonomy of eighty species of the subfamily Ophiderinae, collected between August 1984 and September 1987, a homogenous sample consisting of seven individuals of a species could not be identified from the relevant literature (Hampson 1894, 1902, 1912, 1924, 1926). The species, in fact, belongs to a group of genera such as *Calyptra* Ochseneimer, *Oraesia* Guenee, *Culasta* Moore and *Hypocala* Guenee. The examination of various morphological characters, especially the wing ve-

nation and genitalia, followed by their evaluation and comparison with the known genera indicated that the new species requires to be placed under a new genus. Accordingly a new genus *Indocala* is proposed for the new species *punjabensis*.

Genus *Indocala* n. gen. nov.

Type-species: *Indocala punjabensis* sp. nov.

Labial palpus porrect, triangularly scaled; antenna simple, minutely ciliated. Forewing without areole, discal cell more than half the length of wing, R₃ and R₄ not stalked. Hindwing with discal cell slightly more than one-third the length, R_s and M₁, and M₃ and Cu₁ connate before anterior and posterior angle respectively. Male genitalia with uncus trifold, socii present, valva with well developed saccular extension, harpe

¹ Accepted August 1988.

² Department of Zoology, Punjabi University, Patiala-147 002, Punjab, India.